

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. In the claims

As shown in the foregoing AMENDMENT TO THE CLAIMS, the claims have been amended to more clearly point out the subject matter for which protection is sought.

A. Claim Amendments

Claim 2 is amended to replace the obvious typographical error of the word "said" with the word "side" as suggested in the Office action. It is respectfully submitted that no new matter is added, since the amendment merely corrects an obvious informality.

Claims 1 and 3-9 are left unchanged.

Entry of the AMENDMENT TO THE CLAIMS is respectfully requested in the next Office communication.

B. Claim objections

Reconsideration and removal of the objection to claim 2 is respectfully requested, in view of the amendment to claim 2, on the basis that amended claim 2 correctly recites the side of the cassette.

Accordingly, removal of this objection is respectfully requested.

2. Rejection of claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,942,775 (Fox) in view of U.S. patent no. 5,888,364 (Schuette)

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1-5.

A. The cited references do not disclose or suggest every claimed limitation

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1-5 because the cited references fail to disclose or suggest every limitation of pending claim 1.

Neither the *Fox* nor the *Schuette* patents disclose a clip having a plurality of guide slots facing in a direction parallel to the clamping direction and a bevel slit within the clip, as required by pending claim 1.

Pending claim 1 requires a module with an upright cassette having clamping assemblies on a *right and left end* thereof. The clamping assembly includes at least a clip having a plurality of guide slots facing in a direction parallel to the clamping direction. A plurality of protrusions is correspondingly provided on the cassette to slip into the guide slots. The clip further includes a bevel slit linked with a rotating knob via a pusher rod that is insertable into the bevel slit.

The configuration of the embodiment of pending claim 1 provides a convenient to use clamping mechanism. Further, due to the configuration of the clip and the rotating knob engaging the bevel slit of the clip, a uniform pressure force is applied across the cassettes.

In contrast to the embodiment of pending claim 1, the *Fox* patent discloses a clamping mechanism similar to that shown in Fig. 2 of the pending application. In particular, the *Fox* patent discloses cassettes 57 that are clamped to upright stanchions 44 via the clamping mechanisms 53 shown in Figs. 3 and 4 (col. 5, lines 46-55).

The clamping mechanisms 53 consist of molded and/or machined plastic runners (clips) that are held in place via knobbed nuts 55 which are fastened to screws 56 that are embedded into the front and rear faces of stanchions 44 (col. 5, lines 46-55). Presumably there are holes in the runners to allow the passage therethrough of the screws 56. Tightening of the knobbed nuts 55 clamps the cassettes in place, while

loosening the knobbed nuts allows biasing springs to push the runners away from the cassettes (col. 8, lines 19-28).

This configuration differs from pending claim 1 in that the clamping mechanisms of the *Fox* patent are provided on front and rear faces of the stanchions, and are not located at a *right and left end* of the stanchions, as is required by pending claim 1. Thus, this configuration is tedious to use and allows non-uniform pressure to be applied across the faces of the cassettes, since each knob/clamp must be tightened independently.

Further, the holes in the runners are positioned perpendicularly to the direction of clamping to allow the screws to pass therethrough as opposed to *parallel* to the direction of clamping, as required by pending claim 1.

The *Fox* patent further fails to disclose a beveled slit in the runner for receiving a pusher rod of the rotating knob such that rotating the knob pushes and guides to press the carrier sets towards the cassette, as required by pending claim 1.

The rejection relies on the teachings of the *Schuetz* patent to overcome the deficiencies of the *Fox* patent. However, the *Schuetz* patent fails to make up for the shortcomings of the *Fox* patent, as described below.

The *Schuetz* patent discloses clamps 105 positioned on the ends of the device for clamping gel mold assemblies onto a gel slab platform (col. 6, lines 36-38). Each clamp 105 includes a rotating knob 1102 and an L-shaped mounting platform 1116 having a top surface 1118 (col. 6, lines 61-62). A T-shaped groove 1122 is formed in the top surface to engage a pin 1110 and roller 1112 of the knob 1102 (col. 6, lines 61-67; col. 7, lines 1-5).

The T-shaped groove of the *Schuetz* patent is not a bevel groove, as required by pending claim 1, since a bevel groove must be an oblique groove in view of the description and figures of the pending application and in view of the definition of the word bevel. Thus, the *Schuetz* patent also fails to disclose a clip having a bevel groove, as required by pending claim 1.

Further, while the rejection suggests that the holes 208 are guide slots in the clip that are facing in a direction parallel to the clamping direction, as is clearly stated in the *Schuette* patent, holes 208 are provided in the side panels 302 of the apparatus, and not in the L-shaped platform/clip 1116 (col. 7, lines 11-14). Further, a hinge pin, which is not a protrusion from the cassette, is provided for passing through holes 208 and the hinge portion 1130 of the mounting plate 1126 that is secured to the L-shaped platform 1116 (col. 7, lines 11-14).

Thus, the *Schuette* patent fails to disclose guide slots in a clip facing in a direction parallel to the clamping direction, protrusions on the cassette for slipping into the guide slots, and a bevel slit within the clip, as required by pending claim 1.

Accordingly, since neither the *Fox* nor the *Schuette* patents disclose a clip having a plurality of guide slots facing in a direction parallel to the clamping direction and a bevel slit within the clip, as required by pending claim 1, a *prima facie* case of obviousness cannot be maintained and withdrawal of this rejection is respectfully requested.

B. There is no motivation to combine the cited references

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1-5 because there is no suggestion or motivation to combine the cited references.

As discussed above, the *Fox* patent discloses clamps in the form of screws protruding from the front and rear faces of the stanchions and for engaging with runners that are tightened against the faces of the cassettes. There is no suggestion or teaching that would have motivated a skilled artisan to move the screws and knobs of the *Fox* patent to the right and left ends of the cassette, as required by pending claim 1, since such a modification, would have destroyed the clamping function of the *Fox* patent.

This is because the runners would no longer engage the face of the cassettes, but rather the ends of the cassettes, and accordingly, would not provide sufficient clamping force to retain the carriers to the cassettes.

Further, the hinged clamps of the *Schuette* patent are vastly different in configuration and function to the clamps of the *Fox* patent, and thus, a skilled artisan would not have been motivated to combine the teachings of the *Schuette* and the *Fox* patents. Since each of the clamping mechanisms of the *Schuette* and the *Fox* patents are wholly self contained functional clamping mechanisms, a skilled artisan would not have been motivated to pick and choose selected features from clamping mechanisms that function in wholly different manners, as the clamping mechanisms of the *Schuette* and the *Fox* patents do, in order to describe the features of pending claim 1. Only improper hindsight would provide such a motivation.

Thus, because a skilled artisan would not have been motivated to combine the cited references, a *prima facie* case of obviousness cannot be maintained, and withdrawal of this rejection is respectfully requested.

C. There is no reasonable expectation of success

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1-5 because there is no reasonable expectation of successfully combining the cited references.

Even if the features of the *Fox* and the *Schuette* patents were to be combined, since the clamping mechanisms function in such vastly different ways, there is no reasonable expectation of successfully combining the clamping mechanisms of the *Fox* and the *Schuette* patents. Simply adding a T-shaped groove and a peg to the runner and knob of the *Fox* patent, as described by the *Schuette* patent would provide no additional function to the clamping mechanism of the *Fox* patent.

Further, simply moving the clamping mechanism of the *Fox* patent to the ends, as described by the *Schuette* patent, would destroy the clamping function of the *Fox* patent, as discussed above.

Additionally, as discussed above in section A, even if the features of the *Fox* and the *Schuette* patents were to be combined, there is no reasonable expectation that the combination will successfully disclose guide slots in a clip facing in a direction parallel to the clamping direction, protrusions on the cassette for slipping into the guide slots, and a bevel slit within the clip, as required by pending claim 1, since neither the *Fox* nor the *Schuette* patents discloses these features.

Accordingly, since there is no reasonable expectation of successfully combining the teachings of the *Fox* and the *Schuette* patents, a *prima facie* case of obviousness cannot be maintained, and withdrawal of this rejection is respectfully requested.

3. Rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,942,775 (*Fox*) in view of U.S. patent no. 5,888,364 (*Schuette*) and further in view of U.S. patent no. 5,632,877 (*Van Atta*)

Reconsideration of this rejection is respectfully requested on the basis that the *Van Atta* patent fails to make up for the shortcomings of the *Fox* and *Schuette* patents as discussed in detail above in section 2.

Accordingly, withdrawal of this rejection is respectfully requested.

4. Rejection of claims 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,942,775 (*Fox*) in view of U.S. patent no. 5,888,364 (*Schuette*) and further in view of U.S. patent no. 4,325,796 (*Hoefler et al.*) in view of U.S. patent no. 5,112,470 (*Sylvester*)

Reconsideration of this rejection is respectfully requested on the basis that the *Hoefler* and *Sylvester* patents fail to provide for the deficiencies of the *Fox* and *Schuette* patents as discussed in detail above in section 2.

Accordingly, withdrawal of this rejection is respectfully requested.

5. Rejection of claim 9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 6,942,775 (*Fox*) in view of U.S. patent no. 5,888,364 (*Schuette*) in view of U.S. patent no. 4,325,796 (*Hoefler et al.*) in view of U.S. patent no. 5,112,470 (*Sylvester*) and further in view of U.S. publication no. 2005/0103628 (*Jackson et al.*)

Reconsideration of this rejection is respectfully requested on the basis that the *Jackson* patent further fails to provide for the deficiencies of the *Fox* and *Schuette* patents and the *Hoefler* and *Sylvester* patents as discussed in detail above in sections 2 and 4.

6. Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicant's attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,



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